C07C

Docket No.: C0989.70017US00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Chan et al.
Serial No.:	09/875779
Confirmation No.:	6905
Filed:	June 6, 2001
Patent No.:	6927065 B2
For:	METHODS AND APPARATUS FOR CHARACTERIZATION OF SINGLE POLYMERS
Examiner:	Jan M. Ludlow
Art Unit:	1743

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Attention: Certificate of Correction Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: Aug 15, 2005 Nicole M. Hawes

TRANSMITTAL

Attention: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith are the following documents:

- Request for Certificate of Correction
- Certificate of Correction
- Page of USPN 6,927,065 B2 with error marked in red ink.
- Return Receipt Postcard

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 646-8000, Boston, Massachusetts.

A check is not enclosed. If any fees are required, the Commissioner is hereby authorized to charge Deposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully submitted,

Maria A. Trevisan, Reg. No. 48,207
WOLF, GREENFIELD & SACKS, P.C.
Federal Reserve Plaza
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
(617) 646-8000

Dated: August 15, 2005
xndd

926826-1

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Dated: Aug 15, 2005 Nicole M. Hawes

REQUEST FOR CERTIFICATE OF CORRECTION
PURSUANT TO 37 CFR 1.322

Attention: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant respectfully requests the correction of an error in claim 8 found in the printing of US 6,927,065 B2. The error in claim 8 is due to a PTO printing error, and therefore no fee is due. Correction of this error does not constitute new matter nor does it affect the scope of the claim.

Applicant encloses herewith a copy of the error-containing page from US 6,927,065 B2, with the error marked in red ink.

Applicant respectfully requests a Certificate of Correction for the error outlined herein.

Respectfully submitted,

Maria A. Trevisan, Reg. No. 48,207
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Federal Reserve Plaza
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
(617) 646-8000

Dated: August 15, 2005
xnddx

926826-1

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : US 6,927,065 B2

DATED : August 9, 2005

INVENTOR(S): Chan et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 21, claim 8, line 2, "tiwe" should read -- time --.

MAILING ADDRESS OF SENDER:

Maria A. Trevisan
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600 Atlantic Avenue
Boston, Massachusetts 02210-2211

PATENT NO. US 6,927,065 B2

Form PTO-1050

AUG 2 6 2005

determining the time interval between detection of the leading-edge-rise-time in the first signal amplitude profile and the leading-edge-rise-time in the second signal amplitude profile; and

dividing the predetermined distance between the detection zones by the time interval.

9. The method of claim **1** wherein the detectable region is intrinsically detectable.

10. The method of claim **1** wherein the detectable region is extrinsically detectable.

11. The method of claim **1** wherein the detectable region is detected by measurement of a physical quantity selected from a group comprising of electromagnetic radiation, electrical conductance, thermal conductance, and radioactivity.

12. The method of claim **1** wherein the detectable region is detected by direct or indirect measurement of fluorescent radiation.

13. A method for determining the length of an elongated polymer, the method comprising:

defining a detectable region along the entire length of the polymer;

causing relative movement of the elongated polymer through first and second detection zones, the zones being linearly spaced apart by a predetermined distance;

measuring a time interval between detection of the elongated polymer at the first detection zone and detection of the elongated polymer at the second detection zone;

dividing the predetermined distance between the first and second detection zones by the time interval of step c) to determine the velocity of the polymer;

measuring, at one of the detection zones, a time interval during which the polymer is detected; and

multiplying the velocity of step d) by the time interval of step e) to determine the length of the elongated polymer.

14. A method for determining the distance between first and second landmarks on an elongated polymer, the method comprising:

providing first and second landmarks on an elongated polymer;

causing relative movement of the elongated polymer through first and second detection zones, the zones being linearly spaced apart by a predetermined distance, to cause detection of the first and second landmarks at the first detection zone and detection of the first and second landmarks at the second detection zone;

measuring the time interval between detection of one landmark at the first detection zone and detection of that same landmark at the second detection zone;

dividing the predetermined distance between the first and second detection zones by the time interval of step c) to determine the velocity of the polymer;

measuring the time interval between detection of the first landmark at one detection zone and detection of the second landmark at that same detection zone; and

multiplying the velocity of step d) by the time interval of step e) to determine the distance between the first and second landmarks.

15. The method of claim **1**, wherein the elongated polymer comprises an elongated DNA molecule.

16. The method of claim **13**, wherein the elongated polymer comprises an elongated DNA molecule.

17. The method of claim **14**, wherein the elongated polymer comprises an elongated DNA molecule.

18. The method of claim **1**, wherein the elongated polymer includes fluorescent labels, and further wherein the measurements are measurements of fluorescence intensity.

19. The method of claim **13**, wherein the elongated polymer includes fluorescent labels, and further wherein detection of the elongated polymer comprises detection of fluorescent energy.

20. The method of claim **14**, wherein each of the landmarks comprises a fluorescent label, and further wherein detection of the landmarks comprises detection of fluorescent energy.

21. The method of claim **20**, wherein the first landmark is labeled with a first fluorescent tag and the second landmark is labeled with a second fluorescent tag, and further wherein the first and second fluorescent tags emit fluorescent energy at different and distinguishable wavelengths.

22. The method of claim **1**, wherein the detection zones are positioned along an elongation channel through which the polymer is caused to travel.

23. The method of claim **13**, wherein the detection zones are positioned along an elongation channel through which the polymer is caused to travel.

24. The method of claim **14**, wherein the detection zones are positioned along an elongation channel through which the polymer is caused to travel.

* * * * *